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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,590	03/15/2004	Fritz Leber	ZAHFRI P593US	1645
20210	7590	08/08/2005	EXAMINER	
DAVIS & BUJOLD, P.L.L.C. FOURTH FLOOR 500 N. COMMERCIAL STREET MANCHESTER, NH 03101-1151			BONCK, RODNEY H	
			ART UNIT	PAPER NUMBER
			3681	

DATE MAILED: 08/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/800,590

Applicant(s)

LEBER, FRITZ

Examiner

Rodney H. Bonck

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 03/15/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

The following is a first action on the merits of application Serial No.10/800,590, filed March 15, 2004.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

Receipt is acknowledged of the Information Disclosure Statement filed March 15, 2004. The cited documents have been considered.

Specification

The disclosure is objected to because of the following informalities:

In line 21 of paragraph [012], "t" apparently should be – it --.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 10-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In line 5 of claim 1, "said first piston" lacks a proper antecedent basis. The claim defines "at least one piston" and "a first piston area", but no "first piston". Regarding claim 13, the term "especially" renders the claim indefinite because it is unclear whether the limitation(s) following the term are part of the claimed invention. See MPEP § 2173.05(d). Also, in claim 13, the last three lines of the claim do not make sense. It appears that a portion of the claim has been omitted.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 10 is rejected under 35 U.S.C. 102(b) as being anticipated by Loffler et al. ('184). The Loffler et al. device includes a hydrodynamic torque converter with a clutch 5 and an actuation device, which has at least one piston 6. Hydraulic pressure in the housing (line 11) acts on a first piston area and the hydraulic pressure is changeable by a control unit 14 that acts on a second piston area. Pressure acting on the first piston area acts on the control unit via line 43, and the control unit adjusts the

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hydraulic pressure on the second piston area depending on the hydraulic pressure at the first piston area.

Claims 10, 12-14 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Kashiwabara('159). The Kashiwabara device includes a hydrodynamic torque converter (e.g., see Fig. 4) with a clutch 40 and an actuation device, which has at least one piston 49. Hydraulic pressure in the housing acts on a first piston area 52 and the hydraulic pressure is changeable by a control unit 56 that acts on a second piston area 53. Pressure acting on the first piston area acts on the control unit via sensor 58, control 6, and solenoid 55, and the control unit adjusts the hydraulic pressure on the second piston area depending on the hydraulic pressure at the first piston area based on pressure differential. Pressure medium acting on the first piston area acts on the second piston area via valve 56. Kashiwabara provides a pressure sensor at 58. The space 52 formed by the converter housing and the first piston area are connected via the lines connected to valve 56.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Loffler et al.('184) in view of Allen et al.('417). The Loffler et al. device lacks the claimed clutch connecting the torque converter drive mechanism and the pump impeller. Allen et al., however, shows a hydrodynamic torque converter with a clutch 27 connecting the converter drive to the pump. It would have been obvious to use the engagement control suggested by Loffler et al. in an arrangement such as that of Allen et al., the motivation being to provide controlled engagement of the pump to the converter drive.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kashiwabara('159) in view of Evans et al.('520). The Kashiwabara device does not appear to control the pressure according to pump speed. Evans et al. discloses a clutch control wherein speed sensors are provided and used in controlling the clutch engagement. Since the slip or relative speed of the pump and turbine is being controlled by the pressure differential, it would have been obvious, particularly in view of Evans et al., to sense pump and turbine speed in Kashiwabara and control pressure differential accordingly, the motivation being to provide accurate slip control.

Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kashiwabara('159) in view of Holdeman('657). In Kashiwabara it is not clear whether the fluid passages are formed in a non-turnable shaft connected with the stator. Holdeman discloses a torque converter clutch control wherein fluid passages to both sides of the piston are provided inside the turbine shaft 40 (Fig. 5) and thus can be said

to be "in a non-turnable shaft connected with a stator" as claimed. It would have been obvious to so dispose the passages in Kashiwabara, the motivation being to provide a radially compact fluid supply.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Leber(US 2004/0188210 A1) shows a related application. Nakamura et al.('586) shows passages in a stator shaft. Ando('090)and Bojas('880) show relative pressure control. Olson et al.(H964) is cited for its showing of a speed sensor. Hiramatsu('988) and Waterbury et al.('226) show other pressure control arrangements for torque converter clutches.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney H. Bonck whose telephone number is (571) 272-7089. The examiner can normally be reached on Monday-Friday 7:00AM - 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on (571) 272-7095. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Rodney H. Bonck
Primary Examiner
Art Unit 3681

rhb
August 3, 2005